

APOJET S Combi

Advanced Solid State Aircraft GPU*

- **28V DC 600A and 60KVA 400Hz**
- **Multiple Applications**
- **28V DC Voltage & Current Regulation**
- **Galvanic Isolation**

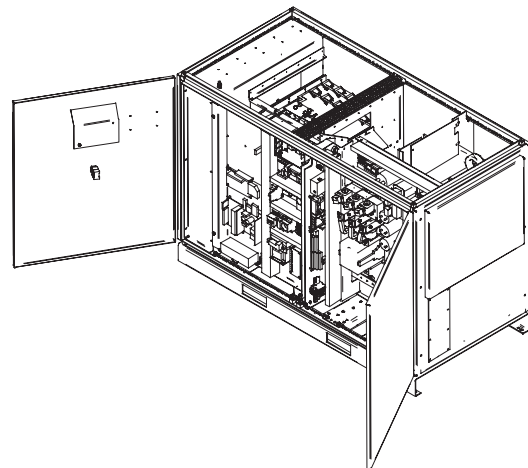
The APOJET S Combi static frequency converter is designed to generate 400Hz and 28VDC power for aircraft supply as a combination, used as a decentralized Ground Power System mounted on the apron, beside a boarding bridge or as a trailer mounted mobile version. Using the latest state-of-the-art technology and newest trends in the power electronics field and digital control, the system offers the best solution for aircraft ground power supply systems.



Rating 60KVA (400Hz) and 600A (28VDC)

- regulated rectifier with IGBT's (THD at input current $\leq 5\%$)
- fully-controlled inverter with IGBT's and pulse-width modulation
- heavy duty uncontrolled rectifier for 28V
- isolating transformer and special earth leakage protection
- low output distortion factor and constant output voltage even in case of non-linear loads

* Ground Power Unit



Nothing protects quite like Piller

TECHNICAL DATA SHEET

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Converter Type	AJS Combi 60	
	at 400Hz Output	at 28VDC Output
Dimensions (w x d x h) mm/IN		
- indoor	1610 x 810 x 1110 / 63.4 x 31.9 x 43.7	
- outdoor	1800 x 900 x 1165 / 70.9 x 35.4 x 45.9	
Recovery time	≤ 200ms	
Wave form	sinusoidal	
Phase angle	120° ± 1.5°	
Power factor	> 0.96	
Ingress protection	IP 43 / NEMA 1 (indoor) or IP 54 / NEMA 3R (outdoor)	
Ambient temperature °C / °F	0 to +40 / +32 to 104 indoor, (-20 to +40 / 0 to +104 outdoor)	
Humidity	max. 95% without condensation	
Cable entry	bottom or right side entry	
Paint finish	RAL 7032 (other colors on request)	
Paint treatment	phosphatized, primed and powder sprayed	

Input Data

Nominal input current at 400V	76A	28,8A
Nominal input current at 480V	63A	24A
Nominal voltage, 3ph	400V ± 10% / 480V ± 10%	
Nominal frequency	50Hz ± 5% / 60Hz ± 5%	
Harmonic content at mains current	≤ 5%	

Output Data

Nominal current	173A	600A
Output power at p. f. 0.8	60KVA	16,8kW
Nominal frequency	400Hz ± 0.1%	DC
Nominal voltage 3ph,	200/115V 3ph, 4 wires	28V
Distortion factor	at linear load < 3%	ripple < 1 V adjustable
Current limit	-	adjustable
Voltage adjustment range	+ 12% / - 5%	+ 14% / - 7%
Voltage characteristics		
- steady state	± 1%	± 1%
- dynamic	acc. to MIL-Std. 704F, fig 3	acc. to MIL-Std. 704F, fig 13



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